REMARKS

Reconsideration of this application is respectfully requested in light of the foregoing amendments and the following remarks.

Claim 45 was amended for reasons unrelated to patentability, including at least one of: to explicitly present one or more elements implicit in the claim as originally written when viewed in light of the specification thereby not narrowing the scope of the claim, to detect infringement more easily, to enlarge the scope of infringement, to cover different kinds of infringement (direct, indirect, contributory, induced, and/or importation, etc.), to expedite the issuance of a claim of particular current licensing interest, to target the claim to a party currently interested in licensing certain embodiments, to enlarge the royalty base of the claim, to cover a particular product or person in the marketplace, and/or to target the claim to a particular industry.

Claims 1-52 are now pending in this application. Claims 1, 19, 36, 39, 41, 44, and 51 are the independent claims.

I. The Objection to Claims 45

Claim 45 was objected to because of informalities. Claim 45 has been amended to correct the informality. Reconsideration and withdrawal of this rejection is respectfully requested.

II. The Utility Rejection

Claim 36 was rejected under 35 U.S.C. 101 as lacking utility. This rejection is respectfully traversed.

The rejection of claim 36 argues that "the claim fails to provide steps leading to a useful, concrete, and tangible result". See Office Action page 2.

MPEP 2107 establishes guidelines for compliance with the utility requirement of 35 U.S.C. 101. MPEP 2107 recites:

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Office personnel are to adhere to the following procedures when reviewing patent applications for compliance with the "useful invention" ("utility") requirement of 35 U.S.C. 101 and 112, first paragraph.

- (A) Read the claims and the supporting written description.
- (1) Determine what the applicant has claimed, noting any specific embodiments of the invention.
- (2) Ensure that the claims define statutory subject matter (i.e., a process, machine, manufacture, composition of matter, or improvement thereof).
- (3) If at any time during the examination, it becomes readily apparent that the claimed invention has a well-established utility, do not impose a rejection based on lack of utility. An invention has a well-established utility if (i) a person of ordinary skill in the art would immediately appreciate why the invention is useful based on the characteristics of the invention (e.g., properties or applications of a product or process), and (ii) the utility is specific, substantial, and credible.
- (B) Review the claims and the supporting written description to determine if the applicant has asserted for the claimed invention any specific and substantial utility that is credible:
 - (1) If the applicant has asserted that the claimed invention is useful for any particular practical purpose (i.e., it has a "specific and substantial utility") and the assertion would be considered credible by a person of ordinary skill in the art, do not impose a rejection based on lack of utility.

See MPEP 2107 II.

Implementing this procedure, one sees that claim 36 recites a "computer program product comprising a computer-readable storage medium and having data stored thereon, the data comprising a representation of **industrial automation control code** formatted in a markup language". Thus, claim 36 defines statutory subject matter.

Reviewing the written description, one finds that specific and substantial utility for this claim is recited that would be considered credible by a person of ordinary skill in the art. For example, at page 8, lines 14-15 recites: "graphical programming language code for industrial automation." As another example, at page 3, line 20 through page 4, line 6 is recited: "methods and computer program products for storing graphical, industrial automation programs in a standard format, one that is serialized, relies on a text-based language (i.e., a mark-up language), includes tags or analogous functionality for identifying items, and that has as the ability to describe data hierarchically. More specifically, the present invention provides a mechanism that is standardized, readable by a human, supported by existing browser technology (e.g., Microsoft Internet Explorer 5 ("IE5")), is easy and fast parsing, and that supports hierarchical information structures."

Notably, neither 35 U.S.C. 101 nor MPEP 2107 require that a claim include an "action step for implementing", "specify[] actions performed by [its] elements", or "provide steps leading to a useful, concrete, tangible result".

Thus, reconsideration and withdrawal of this rejection is respectfully requested. If the rejection is maintained, Applicant respectfully requests citation of proper and complete legal support for the applied **utility** standard.

Further, if the rejection is maintained, Applicant respectfully requests application of the proper procedure for asserting a utility rejection. Specifically, the MPEP recites:

(C) Any rejection based on lack of utility should include a detailed explanation why the claimed invention has no specific and substantial credible utility.

Whenever possible, the examiner should provide documentary evidence regardless

of publication date (e.g., scientific or technical journals, excerpts from treatises or books, or U.S. or foreign patents) to support the factual basis for the prima facie showing of no specific and substantial credible utility. If documentary evidence is not available, the examiner should specifically **explain the scientific basis** for his or her factual conclusions.

- (1) Where the asserted utility is not specific or substantial, a prima facie showing must establish that it is more likely than not that a person of ordinary skill in the art would not consider that any utility asserted by the applicant would be specific and substantial. The prima facie showing **must** contain the following elements:
 - (i) An explanation that clearly sets forth the reasoning used in concluding that the asserted utility for the claimed invention is not both specific and substantial nor well-established;
 - (ii) Support for factual findings relied upon in reaching this conclusion; and (iii) An evaluation of all relevant evidence of record, including utilities taught in the closest prior art.
- (2) Where the asserted specific and substantial utility is not credible, a prima facie showing of no specific and substantial credible utility must establish that it is more likely than not that a person skilled in the art would not consider credible any specific and substantial utility asserted by the applicant for the claimed invention. The prima facie showing **must** contain the following elements:
 - (i) An explanation that clearly sets forth the reasoning used in concluding that the asserted specific and substantial utility is not credible;
 - (ii) Support for factual findings relied upon in reaching this conclusion; and
 - (iii) An evaluation of all relevant evidence of record, including utilities

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taught in the closest prior art.

See MPEP 2107 II C.

III. The Obviousness Rejection

Claims 1-5, 7-10, 12-13, 15-17, 19-23, 25-28, 30-32, 34-44, and 46-52 were rejected under 35 U.S.C. § 103(a) as being unpatentable over various combinations of Lau (U.S. Patent No. 6,598,219) in view of Hoskins (U.S. Patent No. 6,167,406). These rejections are respectfully traversed.

Claims 6, 11, 14, 18, 24, 29, 33, and 45 were rejected under 35 U.S.C. § 103(a) as being unpatentable over various combinations of Lau (U.S. Patent No. 6,598,219) in view of Hoskins (U.S. Patent No. 6,167,406), and further in view of Suzuki ("Making UML Models Exchangeable over the Internet with XML: UXF Approach"). These rejections are respectfully traversed.

None of the cited references, either alone or in any combination, establish a *prima facie* case of obviousness. "To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim limitations. The teaching or suggestion to make the claimed combination and the reasonable expectation of success must both be found in the prior art, and not based on applicant's disclosure." See MPEP § 2143.

To the extent that official notice is taken to support the rejection, for example on page 9 of the present Office Action, Applicants respectfully traverse and request citation and provision of a reference that supports the rejection. See MPEP & 2144.03.

Each of independent claims 1, 19, 36, 39, 41, 44, and 51 recite "code" and/or "programs" for "industrial automation" in a "markup language format".

Hoskins allegedly recites that "HyperText Markup Language (HTML)" (see col. 11, lines 53-54) "has proven to be inadequate in the following areas: Poor performance; Restricted user interface capabilities; Can only produce static Web pages; Lack of interoperability with existing applications and data; and Inability to scale" (see col. 12, lines 4-12). Instead of HTML, Hoskins praises Java. See col. 12, lines 20-46.

Thus, Hoskins teaches away from using "a markup language format" for "industrial automation". As a result, one of ordinary skill in the art would have no motivation to consider Hoskins due to the inadequacies of HTML listed by Hoskins.

Because no *prima facie* rejection of any independent claim has been presented, no *prima facie* rejection of any dependent claim can be properly asserted.

Further, the present Office Action asserts regarding claims 8 and 10 that "Lau disclose modeling (Fig. 1-2); hence has **implicitly disclosed** graphical language comprising a flowchart, block diagram, and sequential diagram". See page 5. Regarding claim 16 the present Office Action recites: "Lau discloses an editing interface to enable the user to perform creating a file and define the objects (e.g. Fig. 1-2; col. 5, lines 27-45; col. 6, line 16-10); hence has disclosed editor and generating screen objects which trigger **inherent** commands to generate of metadata in terms of XML or DTD formatted files". The alleged "implicitly disclosed" or "inherent" material is used for rejecting, for example, claims 8, 10, 12, 15, 16, 26, 28, 30, 32, and 35. Lau fails to properly establish inherent anticipation. See MPEP 2112. "Inherent anticipation requires that the missing descriptive material is 'necessarily present,' not merely probably or possibly present, in the prior art." Trintec Indus., Inc. v. Top-U.S.A. Corp., 295 F.3d 1292, 1295, 63 USPQ2d 1597, 1599 (Fed. Cir. 2002). No evidence has been presented that admittedly the "missing descriptive material is 'necessarily present" in Lau.

Consequently, reconsideration and withdrawal of these rejections is respectfully requested.

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CONCLUSION

It is respectfully submitted that, in view of the foregoing amendments and remarks, the application as amended is in clear condition for allowance. Reconsideration, withdrawal of all grounds of rejection, and issuance of a Notice of Allowance are earnestly solicited.

The Office is hereby authorized to charge any additional fees or credit any overpayments under 37 C.F.R. §1.16 or §1.17 to Deposit Account No. 50-2504. The Examiner is invited to contact the undersigned at 434-972-9988 to discuss any matter regarding this application.

Respectfully submitted,

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Date: 3 September 2004

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